

ABSTRACT OF THE DISCLOSURE

Two right and left optical waveguides are provided so as to pass through a first directional coupler, a phase shifter, and a second directional coupler and so that directional couplers are provided in the first directional coupler portion and the second directional coupler portion. A third electrode is provided between these optical waveguides. A first electrode is provided on the left side of the left optical waveguide, and a second electrode is provided on the right side of the right optical waveguide. These electrodes are extended into the first directional coupler. Upon the application of a bias voltage, the voltage is simultaneously applied to all the first to third electrodes. By virtue of this construction, a waveguide-type optical control device can be realized which, in a directional coupler-type Mach-Zehnder (MZ) construction, can improve the extinction ratio without the complication of the construction.